

APPENDIX C



PRE-DEMOLITION/RENOVATION ASBESTOS SURVEY

**240 BEAVER STREET
WALTHAM, MASSACHUSETTS**

**ATC PROJECT NO. 01-207319.07.43
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EXECUTIVE SUMMARY

ATC Group Services LLC formally, Environmental Compliance Services, Inc. (ECS) has completed a survey on October 19, 2016 as an addition to previous surveys for asbestos containing materials (ACM) at six structures located at 240 Beaver Street in Waltham, MA. The non-destructive surveys were performed to identify regulated materials that may be disturbed if any demolition or renovation activities are proposed in the future. Survey findings for the subject sites are presented in the body of this report. The results of this survey do not meet the requirements of the National Emissions Standard for Hazardous Air Pollutants (NESHAPs) for building demolition due to the following limitations:

Administration Building

- Destructive sampling was not employed due to the occupied nature of the building.
- Roof sampling was not preformed due to the occupied nature of the building.

Boiler House

- Interior of the smoke stack was not assessed.
- Boilers were not inspected.

Corn Lab

- Exterior walk-in cooler was not inspected.

Throughout Property

- Underground utilities were not assessed (heating and electrical).

ATC inspectors collected an additional 84 bulk samples of suspect ACM from the interior and exterior of various buildings throughout the property. These samples were analyzed by an accredited laboratory for asbestos content. Analytical results indicate there are numerous materials that are ACM or assumed ACM. Some ACMs identified are components within a building system, such as mastic and floor tile. In this case, the entire system is considered asbestos containing. The inventory of ACM's below is a combination of the previous survey results and the current survey results.

Administration Building

Findings are presented in Tables 3.1.A (Asbestos Containing Materials) and 3.1.G (No Asbestos Detected) and summarized below;

ACM –

- Thermal systems insulation
- Gray with white specks 9"x9" floor tile and associated mastic
- Cream with gray and black specks 12"x12" floor tile and associated mastic
- Brown 9"x9" floor tile and associated mastic
- Brown 12"x12" floor tile and associated mastic
- Black with white specks 12"x12" floor tile and associated mastic
- Window glazing compound
- Window casing caulking
- Sink countertop (transite) and stored transite boards
- Square patterned linoleum countertop
- Blue and white residual acoustical ceiling plasters
- Brown stick pin adhesive on duct work
- Black soundboard adhesive

Gray Building

Findings are presented in Tables 3.1.B (Asbestos Containing Materials) and 3.1.H (No Asbestos Detected) and summarized below;

ACM-

- Gray with white specks 9"x9" floor tile and associated mastic
- Vapor barrier paper
- Green or blue transite boards
- Laboratory sink countertops (transite) and fume hood counter
- White sink undercoating
- Thermal systems insulation
- Window glazing compound
- Window casing caulking
- Black with white streaks counter top sheetgoods
- Decorative plaster skim coat
- Cementitious coating over cork
- Brown adhesive associated with faux tile sink splash guard

Greenhouses

Findings are presented in Tables 3.1.C (Asbestos Containing Materials) and 3.1.I (No Asbestos Detected) and summarized below;

ACM-

- Thermal systems insulation
- Corrugated wall panel and transite board
- Sink undercoat
- Window glazing compound
- Window casing compound
- Caulking
- Black panel adhesive
- Yellow foam insulation adhesive

Corn Lab

Findings are presented in Tables 3.1.D (Asbestos Containing Materials) and 3.1.J (No Asbestos Detected) and summarized below;

ACM-

- Gray with white streaks 9"x9" floor tile and associated mastic
- Stored transite board
- Stored corrugated transite panels
- Door casing caulking
- Gray sink undercoat
- Window glazing compound for the greenhouse

Pesticide Shed and Greenhouse

Findings are presented in Tables 3.1.E (Asbestos Containing Materials) and 3.1.K (No Asbestos Detected) and summarized below;

ACM-

- Window glazing compound

Boiler Building

Findings are presented in Tables 3.1.F (Asbestos Containing Materials) and 3.1.L (No Asbestos Detected) and summarized below;

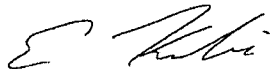
ACM-

- Door casing caulking
- Exterior window casing caulking
- Exterior window glazing compound
- Roping around smoke stack metal breeching
- Incinerator components
- Yellow insulation between metal boiler breeching flanges
- Floor tile in storage (boxes)

Analytical data sheets for samples collected during the October 2016 survey are provided as Appendix A. Upon request ATC can provide the 2007 survey report including PLM and Paint Chip lab data.

The following report summarizes the independent conclusions representing ATC's best professional judgment based on information and data available to us during the course of this investigation. Factual information regarding operations, conditions, and test data provided by the Client, owner, or their representative has been assumed to be correct and complete. Additionally, the conclusions presented are based on the conditions that existed at the time of the assessment.

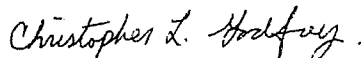
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1.0 INTRODUCTION

This survey was performed at the request of Mr. Michael Grover with the University of Massachusetts, Amherst Environmental Health & Safety department for the purpose of identifying hazardous building materials that may exist within the currently occupied and unoccupied structures at 240 Beaver Street in Waltham, Massachusetts. ATC conducted limited asbestos inspections on six structures located at the property. The structures inspected are as follows: Administrative Building, Gray Building, Greenhouse(s), Corn Lab, Boiler House and Pesticide Shed. The Administrative Building is an occupied 3 level office building. The Gray Building is an unoccupied 3 level building with a functioning and occupied garage addition. The Greenhouses are 1 level unoccupied structures associated with the Gray Building, Corn Lab and Pesticide Shed. The Corn Lab is a 1 level unoccupied laboratory building. The Boiler House is a 2 level occupied mechanical space. The Pesticide Shed is a 1 level occupied storage structure.

Regulatory requirements and survey practices applicable to demolition projects in Massachusetts are as follows, but not limited to the following:

Asbestos

- The United States Environmental Protection Agency (USEPA) National Emissions Standard for Hazardous Air Pollutants (NESHAPs, 40 CFR 61, Subpart M) requires facilities be inspected by competent persons for the presence of asbestos containing materials (ACM) which could or will be disturbed during renovation, construction and demolition activities. Where quantities of ACM exceed 160 square feet or 260 linear feet, asbestos abatement (removal) is required.
- The Massachusetts Department of Environmental Protection (MassDEP) additionally regulates ACM under 310 CMR 7.15 & 310 CMR 19.061.
- The Massachusetts Department of Labor and Workforce Development, Department of Occupational Safety (MA DLWD-DOS) regulates asbestos worker protection and work practices under 453 CMR 6.00.
- The Occupational Safety and Health Administration (OSHA) regulates asbestos worker protection under 29 CFR 1926.1101.

1.1 LIMITATIONS

The term “non-destructive sampling method” refers to a method of collecting samples that does not significantly impact interior or exterior finishes of the building. Surveys for the presence of ACM are therefore limited to those materials accessible by non-destructive sampling methods. ACM may be present in materials not accessible by this sampling methodology, and may be encountered during renovation or demolition of the structure. The term “destructive sampling method” refers to the method of collecting samples that would require destruction of various building systems (i.e. wall cavities, ceilings, flooring materials, roofing) for the purpose of locating hidden heating, plumbing, or other building components that may contain ACM. Destructive methods are recommended for properties slated for demolition. Additional limitations may exist for both destructive and non-destructive sampling methods. Certain locations of the building may be physically inaccessible, or inaccessible due to electrical, mechanical, structural, or other hazards which might exist in the structure at the time of the survey.

ATC evaluated accessible spaces of the buildings. Areas that were accessible only through structurally damaging methods or were part of or within energized equipment were not evaluated.

Two newer vintage boilers were observed within the boiler house. It appears that the identical boilers were installed sometime during the 2000's. One of the boilers was operating at the time of our survey and the other boiler was being used for parts. It cannot be definitively stated that this equipment does not contain ACM without performing destructive sampling. It is recommended that a NESHAPs trained person evaluate this equipment before demolition activities.

An exterior walk-in cooler was observed behind the Corn Lab. It cannot be definitively stated that this equipment does not contain ACM without performing destructive sampling. It is recommended that a NESHAPs trained person evaluate this equipment before demolition activities.

ATC inspectors suspect that there are underground utilities that may contain hazardous materials (Asbestos, Lead, PCB's etc). ATC recommends that any MEP drawings be consulted prior to any excavation that may unearth any potential hazardous materials.

Suspect ACM subsequently identified or encountered in physically inaccessible areas during demolition and/or demolition activities and not listed in this report should be assumed to contain asbestos unless testing confirms otherwise.

The following areas were not included in the scope of work at the time of this evaluation.

- Materials only accessible through structural demolition;
- Materials entombed or beneath concrete;
- Materials associated with functional equipment, machinery, and building systems including mechanical, plumbing, electrical and HVAC; and
- Materials below-grade.

2.0 METHODS AND MATERIALS

2.1 ASBESTOS

Samples were collected per regulations governing asbestos surveys. Samples were placed into plastic bags with an air tight seal. Labels were affixed to the sample bags with specific nomenclature.

Bulk samples were analyzed by Polarized Light Microscopy (PLM) using the USEPA/600/R-93/116 method. Sample analysis was conducted by ProScience Analytical Services, Inc., 22 Cummings Park, Woburn, Massachusetts (NVLAP Accreditation 2000090-0).

There are six minerals grouped into the term "asbestos". Chrysotile, amosite, and crocidolite are the asbestos minerals most commonly found in building materials. ACM is defined as a material containing more than one percent (1%) asbestos by weight. ACBM is a subset of materials in the group ACM and are considered to be ACM that is found in or on interior structural members of a building. Materials found to be asbestos containing are listed in Section 3.0. Exact sample compositions are included in the laboratory reports or chains of custody found in Appendix A.

Types, locations, estimated quantities, and conditions of ACM or assumed ACM are shown in Tables 3.1.A, B, C, D, E and F. Suspect materials sampled and found not to contain asbestos are found in Tables 3.1.G, H, I, J and K.

PLM is the root method used for the identification of ACM. The USEPA Office of Research and Development (USEPA/ORD) has reviewed data from performance audits of various laboratories performing PLM. The results of that review indicated an unacceptable number of false negatives and positives for visual estimation of materials containing less than 10% asbestos. On the basis of those findings the NESHAP regulations were amended on November 20, 1990 (Federal Register, V.55, and N.224). The revisions state that if the analyst detects asbestos in the sample and estimates the amount to be less than 10% by visual estimation, the parties legally responsible (owner or operator) for the building may (1) elect to assume the amount to be greater than 1% and treat the material as ACM or (2) require verification of the amount by point counting. Point counting is a technique used to quantify the amount of asbestos present in a sample on which PLM has already been performed. ATC recommends point counting re-analysis for asbestos values less than 10%, and where applicable, those results are reflected in this report. In instances where client authorization is not received for this re-analysis, PLM visual results indicating a trace or 1% value will be reported as assumed ACM as required by item (1) above.

A similar situation exists for matrix bound fibers such as those found in floor tiles, mastics, and asphalt based materials. The organic matrix of these bulk samples may interfere with the identification and quantification of asbestos mineral content. These types of samples are generally referred to as Non-friable organically bound (NOB) materials. Transmission Electron Microscopy (TEM-NOB) is a method that utilizes a combination of special sample preparation techniques and high magnification to quantify asbestos content with greater accuracy than PLM. Currently only the State of New York has regulations requiring TEM-NOB re-analysis of suspect ACM for which negative or trace determination resulted from PLM analysis. Although additional cost is involved, ATC recommends TEM-NOB analysis under certain circumstances, as a state of the art means of survey. ATC submitted one sample (17A- Brown/black styrofoam adhesive) for TEM-NOB analysis. The results confirmed that No Asbestos was detected in that sample.

3.0 RESULTS AND FINDINGS

The results of this survey are presented below in tabular form. These tables summarize the nature, distribution and estimated quantity of ACM found during this survey and a previous survey conducted in 2007 by Environmental Compliance Services, Inc.

Asbestos Containing Materials are found in Tables 3.1.A, B, C, D, E and F.

Suspect materials sampled with No Asbestos Detected are found in Table 3.1.G, H, I, J, K and L.

4.0 DISCUSSION AND INTERPRETATION

4.1 ASBESTOS

Response actions are based in part upon our current understanding of area usage or future usage at the time of the survey. Removal is always required where pending demolition will disturb ACM's. Any material discovered in the course of demolition activities, which is not identified in this report, should be presumed to contain asbestos until sampling shows otherwise. Section 1.1 Limitations details areas that were deemed inaccessible or were not included in the scope of work.

5.0 CONCLUSION

Asbestos abatement of items listed in Tables 3.1.A, B, C, D, E and F will be required prior to any demolition work that would disturb these materials. ATC recommends the preparation of an asbestos abatement design specification to direct the safe and efficient removal of ACM materials from these locations. ATC also recommends a timely response action related to ACMs which have been observed as damaged or otherwise non-intact, specifically ACMs within occupied spaces.

TABLES

Table 3.1.A
Asbestos Containing Materials and Affected Building Component Systems

Administration Building

Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Thermal Systems Insulation							
N/A	Thermal Systems Insulation	Room 01	5%-80% Chrysotile and/or 30%-40% Amosite	TSI	Friable, Accessible	Intact	121 LF
Admin 18		Room 02		TSI	Friable, Accessible	Intact	75 LF
N/A		Room 03		TSI	Friable, Accessible	Intact	85 LF
N/A		Room 04		TSI	Friable, Accessible	Intact	110 LF
N/A		Room 05		TSI	Friable, Accessible	Intact	95 LF
N/A		Room 06		TSI	Friable, Accessible	Intact	100 LF
N/A		Room 07		TSI	Friable, Accessible	1 LF Damage, Remainder Intact	100 LF
N/A		Room 08		TSI	Friable, Accessible	Intact	155 LF
N/A		Room 09		TSI	Friable, Accessible	Intact	20 LF
N/A		Room 09A		TSI	Friable, Accessible	Intact	20 LF
N/A		Room 10		TSI	Friable, Accessible	Intact	20 LF
Admin 19		Room 12		TSI	Friable, Accessible	Intact	173 LF
Admin 22, 23, 24		Room 13		TSI	Friable, Accessible	Intact except for 6 LF, Accessible	67
Admin 20, 21		Room 14 and 14A		TSI	Friable, Accessible	Intact except for 9 LF	150 LF
N/A		Room 15		TSI	Friable, Accessible	Intact	70 LF
N/A		Room 16		TSI	Friable, Accessible	Intact	50 LF
N/A		Room 16A		TSI	Friable, Accessible	Intact except for 1 LF, Accessible	100 LF
N/A		Room 17		TSI	Friable, Accessible	Intact	150 LF
N/A		Room 18		TSI	Friable, Accessible	Intact	21 LF
N/A		Room 19		TSI	Friable, Accessible	5 LF Damaged, Remainder Intact	40 LF
N/A		Hallway 099B and 099D		TSI	Friable, Accessible	Intact	230 LF
N/A		Hallway 099 E		TSI	Presumed above hard ceiling	Condition unknown	100 LF
N/A		Hallway 099C		TSI	Friable, Accessible	Intact	4 LF
N/A		Hallway 099A		TSI	Friable, Accessible	Intact	20 LF
N/A		Hallway adjacent to 099A		TSI	Friable, Accessible	Intact	25 LF
N/A		Room 101		TSI	Friable, Accessible	Intact	2 LF
N/A		Room 102		TSI	Friable, Accessible	Intact	15 LF
N/A		Room 103		TSI	Friable, Accessible	Intact	40 LF
N/A		Room 104		TSI	Friable, Accessible	1 LF Damaged, Remainder Intact	40 LF
N/A		Room 105		TSI	Friable, Accessible	Intact	40 LF
N/A		Room 108A		TSI	Friable, Accessible	1 SF Damaged, Remainder Intact	75 LF, 5 SF debris
N/A		Room 109A		TSI	Friable, Accessible	Intact	20 LF
N/A		Room 112		TSI	Friable, Accessible	Intact	15 LF
N/A		Room 117		TSI	Friable, Accessible	Intact	15 LF
N/A		Room 119		TSI	Friable, Accessible	Intact	50 LF

N/A				TSI	Friable, Accessible	Intact	10 LF
N/A				TSI	Friable, Accessible	Intact	25 LF
N/A				TSI	Friable, Accessible	Intact	10 LF
N/A				TSI	Friable, Accessible	Intact	2 LF
N/A				TSI	Friable, Accessible	Intact	12 LF
N/A				TSI	Friable, Accessible	Damaged	3 LF
N/A				TSI	Friable, Accessible	Intact	8 LF
N/A				TSI	Friable, Accessible	Intact	15 LF
N/A				TSI	Friable, Accessible	Intact	3 LF
N/A				TSI	Friable, Accessible	Damaged	13 LF
N/A				TSI	Friable, Accessible	Damaged	13 LF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Floor Tile and Associated Mastic							
	Residual black mastic	Room 03	2% Chrysotile	Misc.	Non-friable, accessible	Intact	100 SF
Admin 06, 6M, Admin 05, 5M Admin 34, 34M, Admin 50, 50M	Gray with white specks 9"x9" floor tile and associated mastic	Room 10		Misc.	Non-friable, accessible	Intact	230 SF
		Room 12		Misc.	Non-friable, accessible	Approx. 200 SF damaged	300 SF
		Room 16		Misc.	Non-friable, accessible	Intact	90 SF
		Room 101		Misc.	Non-friable, accessible	Intact	230 SF
		Room 104		Misc.	Non-friable, accessible	Intact	120 SF
		Room 119		Misc.	Non-friable, accessible	Intact	325 SF
		Room 207		Misc.	Non-friable, accessible	Intact	115 SF
		Room 208		Misc.	Non-friable, accessible	Intact	235 SF
		Room 211		Misc.	Non-friable, accessible	Intact	215 SF
		Room 212		Misc.	Non-friable, accessible	Intact	115 SF
		Room 213		Misc.	Non-friable, accessible	Intact	120 SF
		Room 214		Misc.	Non-friable, accessible	10 SF damaged	230 SF
Admin 02, 2M, Admin 03, 04, 07, 3M, 4M,	Cream with gray and black specks 12"x12" floor tile and associated mastic	Hallway 099E		Misc.	Non-friable, accessible	Intact	981 SF
		Room 19		Misc.	Non-friable, accessible	Intact	2,567 SF
Admin 25, 25M	Brown 9"x9" floor tile and associated mastic	Room 09		Misc.	Non-friable, accessible	20 SF Damaged	100 SF
		Room 09A		Misc.	Non-friable, accessible	Intact	100 SF
Admin 28, 28M	Brown 12"x12" floor tile and associated mastic	Hallway 099C		Misc.	Non-friable, accessible	Intact	62 SF
		Hallway 099D		Misc.	Non-friable, accessible	Intact	66 SF
		Room 102		Misc.	Non-friable, accessible	Intact	140 SF
		Room 105		Misc.	Non-friable, accessible	Intact	150 SF
		Room 108		Misc.	Non-friable, accessible	Intact	16 SF
		Room 108A		Misc.	Non-friable, accessible	Intact	170 SF
		Room 110		Misc.	Non-friable, accessible	Significantly Damaged	143 SF

Admin 25, 25M, Admin 46, Admin 54, Admin 38, 49, 38M	Brown 9"x9" floor tile and associated mastic	Room 112			Non-friable, accessible	Intact	250 SF
		Room 112A		Misc.	Non-friable, accessible	Intact	25 SF
		Room 117		Misc.	Non-friable, accessible	Intact	220 SF
		Room 118		Misc.	Non-friable, accessible	Intact	20 SF
		Room 120		Misc.	Non-friable, accessible	Intact	120 SF
		Room 121		Misc.	Non-friable, accessible	Intact	160 SF
		Room 122		Misc.	Non-friable, accessible	Intact	320 SF
		Room 124		Misc.	Non-friable, accessible	Intact	115 SF
		Hallway 199D		Misc.	Non-friable, accessible	Intact	170 SF
		Room 201		Misc.	Non-friable, accessible	Intact	225 SF
		Room 202		Misc.	Non-friable, accessible	Intact	112 SF
		Room 203		Misc.	Non-friable, accessible	Intact	110 SF
		Room 204		Misc.	Non-friable, accessible	Intact	340 SF
		Room 209		Misc.	Non-friable, accessible	Intact	340 SF
		Room 210		Misc.	Non-friable, accessible	Intact	135 Sf
		Hallway 299B and 299C		Misc.	Non-friable, accessible	Intact	425 SF
Admin 40, 40M	Black with white specks 12"x12" floor tile and associated mastic	Hallway 199B			Non-friable, accessible	Intact	340 SF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Exterior window glazing and casing caulking							
Admin 31, 32, 33, 47, 48, 64, 65, 66	Window glazing compound and casing caulking	Exterior of building	2%-10% Chrysotile	Misc.	Non-friable, Accessible	~75% are Damaged	115 Windows
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Transite							
Admin 61	Transite Counter Top Sink	Room 11	15% Chrysotile	Misc.	Non-friable, accessible	Intact	26 SF
	Counter top transite	Room 214		Misc.	Non-friable, accessible	Damaged	30 SF
	Stored transite	Room 109		Misc.	Non-friable, Accessible	Intact	4 SF
		Room 205		Misc.	Non-friable, Accessible	Intact	30 SF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Sheet goods on countertops							
07A, 07B	Square Pattern Linoleum on Counter	Room 101	20% Chrysotile	Misc.	Non-friable, Accessible	Intact	30 LF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Admin 15B, 16B, 15W, 16W	Residual acoustical ceiling plaster (two layers, blue and white) left after abatement was completed.	Room 019 Perimeter	2% Chrysotile	Surf.	Friable, Accessible	Intact	1/4"-1/2" strip around the ceiling perimeter
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Miscellaneous							
01A, 01B	Brown Stick Pin Adhesive on Metal Ductwork	019- Auditorium	10% Chrysotile	Misc.	Non-Friable; Accessible	Intact	200 SF
13A, 13B	Black Soundboard Adhesive	Room 09A (Patch)	10% Chrysotile	Misc.	Non-Friable; Accessible	Intact	10 SF
		Room 202	10% Chrysotile	Misc.	Non-Friable; Accessible	Intact	30 SF

Table 3.1.B
Asbestos Containing Materials and Affected Building Component Systems

Gray Building

Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Flooring and Associated Mastic							
Gray 10,10V, 11, 13, 27, 27P 28, 10M, 11M, 27M, 28M	Gray with white specks 9"x9" floor tile, Associated Vapor Barrier Paper and associated mastic	Room 105	<1%-15% Chrysotile	Misc.	Non-friable, accessible	Intact	350 SF
		1st floor hallway		Misc.	Non-friable, accessible	Intact	150 SF
		1st floor bathroom		Misc.	Non-friable, accessible	Intact	50 SF
		1st floor small storage room adjacent to large storage room		Misc.	Non-friable, accessible	Intact	150 SF
		2nd floor hallway		Misc.	Non-friable, accessible	Intact	200 SF
		Small room in 2nd floor hallway		Misc.	Non-friable, accessible	Intact	70 SF
		Room 202		Misc.	Non-friable, accessible	Intact	120 SF
		Room 202A		Misc.	Non-friable, accessible	Intact	175 SF
		Room 203		Misc.	Non-friable, accessible	Damaged	160 SF
		Room 203A		Misc.	Non-friable, accessible	Intact	85 SF
		Room 204		Misc.	Non-friable, accessible	Intact	260 SF
		Room 204A		Misc.	Non-friable, accessible	Intact	130 SF
		Room 221		Misc.	Non-friable, accessible	Intact	225 SF
		Room 221A		Misc.	Non-friable, accessible	Intact	160 SF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Transite boards, Transite sinks, Sinks with undercoating and lab benches							
Gray 39	Green or blue transite boards	Room 105	5%-20% Chrysotile	Misc.	Non-friable, accessible	Intact	45 SF
		Room 201		Misc.	Non-friable, accessible	Intact	15 SF
		Room 203		Misc.	Non-friable, accessible	Intact	8 SF
		Room 204		Misc.	Non-friable, accessible	Intact	18 SF
		Basement near stairs to sub-basement		Misc.	Non-friable, accessible	Intact	5 SF
N/A	Fume hood counter	Room 204		Misc.	Non-friable, accessible	Intact	10 SF
Gray 24	Laboratory/sink countertops	1st floor large room		Misc.	Non-friable, accessible	Intact	12 SF
Gray 38	Laboratory/sink countertops	Room 201		Misc.	Non-friable, accessible	Intact	10 SF
Gray 42	Laboratory/sink countertops (small sink)	Room 204		Misc.	Non-friable, accessible	Intact	5 SF
09A, 09B	White Sink Undercoating	Room 105		Misc.	Non-friable, Accessible	Intact	1 Unit
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Thermal Systems/Insulation							
N/A	Thermal systems insulation	Sub-basement Pipe Chase into Greenhouse	Presumed	TSI	Friable, non-accessible	Unknown	~200 LF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Window Glazing Compound							
Gray 43, 44, 45	Window glazing compound	Throughout	2% Chrysotile	Misc.	Non-friable, Accessible	Damaged	60 Units
12A, 12B	Window casing caulking	Garage Exterior	3% Chrysotile	Misc.	Non-friable, accessible	Damaged	6 Units
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Sheet goods							
10A, 10B	Black with white streaks countertop sheet goods	Room 105, Room 204	3% Chrysotile	Misc.	Non-friable, Accessible	Intact	50 SF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Plaster Coatings							
08A, 08B, 08C	Decorative plaster skim	1st Floor Large Storage Room , Room 203 and Room 204	<1%	Misc.	Non-friable, Accessible	Damaged	1,200 SF

01A, Gray 07, Root Cellar 02A,	Cementitious coating over cork	Sub-basement Cooler	<1%	Misc.	Non-friable, accessible	Intact	550 SF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Adhesives							
18A	Brown faux tile adhesive behind sink splash guard	Basement	2% Chrysotile	Misc.	Non-friable, accessible	Intact	10 SF
Notes: 1. The information presented in this report is based on the data provided by the client and the results of the field inspection. It is not intended to be a comprehensive assessment of the entire facility. The results of this inspection are based on the information provided and the results of the field inspection. The results of this inspection are based on the information provided and the results of the field inspection. The results of this inspection are based on the information provided and the results of the field inspection.							

Table 3.1.C
Asbestos Containing Materials and Affected Building Component Systems

Greenhouses

Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Thermal Systems Insulation							
GH-2-04, 05	Thermal Systems Insulation	Greenhouse 3 Trench	10%-75% Chrysotile, 50% Amosite	TSI	Friable, accessible	Damaged	20 LF
		Greenhouse 4 Trench		TSI	Friable, accessible	Damaged	20 LF
		Greenhouse 5A/5B Trench		TSI	Friable, accessible	Damaged	70 LF
		Greenhouse 6 Trench		TSI	Friable, accessible	Damaged	120 LF
		Greenhouse 7 Trench		TSI	Friable, accessible	Damaged	70 LF
		Greenhouse 8 Trench		TSI	Friable, accessible	Damaged	20 LF
		Greenhouse 14 Trench		TSI	Friable, accessible	Damaged	20 LF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Transite							
GH-5-01, GH-1-01, 02, GH-4-04	Corrugated transite wall panel	Greenhouse 2	15%-35% Chrysotile	Misc.	Non-friable, Accessible	Intact	170 SF
		Greenhouse 9		Misc.	Non-friable, Accessible	Intact	140 SF
		Greenhouse 10		Misc.	Non-friable, Accessible	Intact	110 SF
		Greenhouse 11		Misc.	Non-friable, Accessible	Intact	225 SF
	Green or blue transite board	Greenhouse 13		Misc.	Non-friable, Accessible	Intact	14 SF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Window Glazing Compound							
GH-1-03, 04, 05, GH-2-01, GH-3-01, 02, 03, GH-5-02, 03, 04, 05, 06, 07, Gh-4-01, 02	Window glazing compound	Greenhouse 1-15	Trace-15% Chrysotile	Misc.	Non-friable, Accessible	Damaged	16,000 SF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Adhesives and Sink							
GH-2-06	Caulking	Between Small Shed and Greenhouse	15% Chrysotile	Misc.	Non-friable, Accessible	Damaged	100 SF
05A, 05B	Black panel adhesive	Greenhouse 6	10% Chrysotile	Misc.	Non-friable, Accessible	Damaged	110 SF

06A, 06B	Yellow foam insulation adhesive	Greenhouse 13, Greenhouse 14, Greenhouse 15	5% Chrysotile	Misc.	Non-friable, Accessible	Intact	460 SF
GH- 03A, 03B	Sink Undercoat	Exterior Between Greenhouse 8 and Greenhouse 15	7%	Misc.	Non-friable, Accessible	Intact	5 SF

Table 3.1.D
Asbestos Containing Materials and Affected Building Component Systems

Corn Lab

Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Corn Lab ACM							
Corn Lab 01, 02, 1M, 2M	Gray with white streaks 9"x9" floor tile and associated mastic	Main room, entry and bathroom	15% Chrysotile	Misc.	Non-friable, Accessible	35 SF damaged	270 SF
Presumed	Stored transite board	Basement	Presumed	Misc.	Non-friable, Accessible	Intact	2 SF
Presumed	Stored corrugated transite panels	Exterior of Greenhouse	Presumed	Misc.	Non-friable, Accessible	Intact	2 Units, 30 SF Total
Corn Lab 12, Corn Lab 13	Door casing caulking	Front door and door leading to greenhouse	10% Chrysotile	Misc.	Non-friable, Accessible	Damaged	2 Doors
04A, 04B	Gray Sink Undercoating	Main room	10% Chrysotile	Misc.	Non-friable, Accessible	Intact	1 Unit
Presumed	Window glazing compound	Corn lab greenhouse	Presumed	Misc.	Non-friable, Accessible	Damaged	760 LF

Table 3.1.E
Asbestos Containing Materials and Affected Building Component Systems

Pesticide Shed Greenhouse

Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Pesticide Shed Greenhouse ACM							
PS -05, PS-06	Window Glazing Compound	Throughout	5% Chrysotile	Misc.	Non-friable, Accessible	Damaged	546 LF

Table 3.1.F
Asbestos Containing Materials and Affected Building Component Systems

Boiler House

Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Boiler House ACM							
Boiler Bldg 04, 05	Door casing caulking	Throughout	5%-10% Chrysotile	Misc.	Non-friable, Accessible	Damaged	2 Units
Boiler Bldg 01, 02, 03, 06, 07, 08	Exterior window casing caulking and glazing compound	Throughout	2%-10% Chrysotile	Misc.	Non-friable, Accessible	Some Damaged	7 Units
Boiler Bldg 09	TSI roping around metal breeching connected to the smoke stack exterior	Exterior of the building	90% Chrysotile	TSI	Friable, Accessible	Damaged	20LF
B-01A, B-01B	Gaskets associated with steel boiler breaching	Boiler room	10% Chrysotile	TSI	Friable, Accessible	Intact	50 LF
Presumed	Insulation between steel walls of the incinerator, any other suspect components associated with the incinerator	Incinerator room	Presumed	TSI	Friable, Non-accessible	Intact	190 SF
Presumed	Stored boxes of floor tiles	Incinerator room	Presumed	Misc.	Non-friable, Accessible	Intact	2 boxes

Table 3.1.G
Suspect Materials With No Asbestos Detected

Administration Building

Field ID	Description	Location
Admin- 09S, 09B, 10B, 10S, 11B, 11S, 29B, 29S, 30B, 30S, 42, 43, 45B, 45S, 57B, 57S, 58B, 58S	Plaster skim coat and plaster base coat	Admin. building throughout
Admin- 12, 13, 14, 44	Acustical plaster (yellow and white)	Admin. building lobby area outside auditorium
Admin- 17, 26, 26M, 39, 41, 55, 56	Cove base mastic	Admin. building throughout
Admin- 27, 27M	Sound board mastic	Admin. building storage closet outside WCFO
Admin- 35, 53	Stone window sill (black)	Admin. building throughout
Admin- 36	Gray caulking between concrete and black stone window sill	Admin. building 2nd floor 4H kitchen
Admin- 37, 52, 62	Lab sink	Admin. building 2nd floor 4H kitchen, room 201 and 214
Admin- 51, 51M	Lab counter top transite like material	Admin. Building room 201
02A	Black Coating on Block Wall Behind Plaster	Admin Building/ 019 - Auditorium
02B	Black Coating on Block Wall Behind Plaster	Admin Building/ 019 - Auditorium
02C	Black Coating on Block Wall Behind Plaster	Admin Building/ 019 - Auditorium
03A	Yellow Carpet Mastic	Admin Building/ Room 122
03B	Yellow Carpet Matic	Admin Building/ Room 122
04A	Tan Cloth Vibration Dampener	Admin Building/ Room 205A
04B	Tan Cloth Vibration Dampener	Admin Building/ Room 126
05A	Stone Pattern Linoleum on Counter	Admin Building/ Room 012
05B	Stone Pattern Linoleum on Counter	Admin Building/ Room 012
06A	Gold Adhesive assoc. w/05A	Admin Building/ Room 012
06B	Gold Adhesive assoc. w/05B	Admin Building/ Room 012
09A	Black with White Streaks Counter Sheet Goods	Admin Building/ Room 201
09B	Black with White Streaks Counter Sheet Goods	Admin Building/ Room 201
10A	Silver Adhesive Associated with 09A	Admin Building/ Room 201
10B	Silver Adhesive Associated with 09B	Admin Building/ Room 201
11A	Gray Soundboard on Wall	Admin Building/ Room 09A
12A	Cream Adhesive Associated with 11A	Admin Building/ Room 09A

Table 3.1.H
Suspect Materials With No Asbestos Detected

Gray Building

Field ID	Description	Location
Gray- 04, 40, 41	Lab sink	Gray building basement, 2nd floor room 203 and room 204 (large sink)
19A, 19B, Gray PM-01A	Pancling mastic (tan)	Gray building small storage room off large storage room
Gray- 02A, 08, 08P	Cork insulation and vapor barrier paper	Gray building Sub-basement, root cellar
21A, 22A, Gray-09, 09M	Beige 12"x12" floor tile w/ mastic	Gray Building 1st floor large room
03A, 04A, 05A, 05B, Gray- 12, 12P, 12M	Red and black linoleum w/ vapor paper and adhesive	Gray building room 105 office
14B, 14S, 15B, 15S, 16B, 16S, 29B, 29S, 30B, 30S, 31B, 31S	Base and skim plaster	Gray building throughout
Gray- 01, 02, 17, 18, 32, 33, 34	Sheetrock	Gray building throughout
17A, Gray-19	Mastic on styro-foam wall panels	Gray building 1st floor photo room
Gray- 03, 20, 35, 36, 37	Joint compound	Gray building basement, 1st floor hallway and 2nd floor
Gray-25	Rolled asphalt roof	Gray building
Gray-26	Roof flashing	Gray building
07A, 07B, Gray-46	Asphalt roof shingle	Gray building flat roof between gray building and greenhouse garage
06A, 06B	Black cork adhesive on wall	Gray building room 202
11A, 11B	Adhesive associated with black with white streaks counter sheet goods	Gray building room 105 and room 204

13A, 13B	Brown paper under wood siding	Gray building exterior south side
14A, 14B	Top layer tan paper under wood siding	Gray building exterior west side
15A, 15B	Bottom layer thin black paper under 14A, 14B	Gray building exterior west side
16A, 16B	Thick black paper under wood siding	Gray building exterior north side- garage exterior
20A, 20B	Black roof tar paper	Gray building roof
<p>Information Section 3.1.I is a summary of the information provided in the report. It is not intended to be a substitute for the full report. The full report is available for review at the project site. Any suspect materials identified in the report will be presumed ACM until laboratory analysis otherwise indicates.</p>		

Table 3.1.I
Suspect Materials With No Asbestos Detected

Greenhouses

Field ID	Description	Location
GH-1/2 (01)	Rolled roofing	Greenhouse 1&2
GH-1/2 (02), GH-3/4(01), GH-5B(02)	Asphalt shingles	Greenhouses
GH-1/2(03)	Vapor barrier paper	Greenhouse 1&2 on floor
01A, 01B	Planter	Greenhouses
02A, 02B	Black Sink Undercoat	Greenhouse 9
04A, 04B	Yellow Panel Adhesive	Greenhouse 6
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Table 3.1.J
Suspect Materials With No Asbestos Detected

Corn Lab

Field ID	Description	Location
Corn Lab-03B, 03S, 04B, 04S	Base and skim plaster	Corn Lab
Corn Lab- 05, 06, 07, 08, 09	Window glazing compound	Corn Lab
Corn Lab-10	Asphalt roof	Corn Lab
Corn Lab-11	Asphalt flashing	Corn Lab
01A, 01B	Residual Gray Felt Backing on Floor	1st Floor Small Room
02A, 02B	Adhesive Associated with 01A and 01B	2nd Floor Small Room
03A, 03B	Cloth Duct- Round	Corn Lab
<p>Information Section 3.1.I is a summary of the information provided in the report. It is not intended to be a substitute for the full report. The full report is available for review at the project site. Any suspect materials identified in the report will be presumed ACM until laboratory analysis otherwise indicates.</p>		

Table 3.1.K
Suspect Materials With No Asbestos Detected

Pesticide Shed

Field ID	Description	Location
PS-02	Joint compound	Pesticide Shed
PS-03, 04, 06	Window glazing compound	Pesticide Shed
PS-07	Roof asphalt shingle	Pesticide Shed
<p>Information Section 3.1.I is a summary of the information provided in the report. It is not intended to be a substitute for the full report. The full report is available for review at the project site. Any suspect materials identified in the report will be presumed ACM until laboratory analysis otherwise indicates.</p>		

Table 3.1.L
Suspect Materials With No Asbestos Detected

Boiler House

Field ID	Description	Location
BH-01A, BH-01B	Black wrap on fiberglass pipe insulation	Pipe chase
<p>Information Section 3.1.I is a summary of the information provided in the report. It is not intended to be a substitute for the full report. The full report is available for review at the project site. Any suspect materials identified in the report will be presumed ACM until laboratory analysis otherwise indicates.</p>		